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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09-766,880	01-19-2001	Chris L. Jones	110163.132US2	9748

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EXAMINER

SIEW, JEFFREY

ART UNIT

PAPER NUMBER

1637

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/766,880

Applicant(s)

JONES ET AL.

Examiner

Jeffrey Siew

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 25-29 and 64-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 1-66 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 19 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I in Paper No. 21 is acknowledged.

Claims 25-29 & 64-66 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 21.

Pending claims to be examined are 1-24,30-63.

### *Drawings*

2. Figure 9C contains nucleotide sequences that must be identified by SEQ ID Nos.
3. Figure 3 does not show the second electrode and the migration channel that extends between the electrode channels.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16,33,34,37-41,42,43,44-47,48-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1637

A) Method claim 37 depends on a product claim 29. It is unclear as to what is being claimed.

B) The phrase "slot bounded" in claims 1,8,33,37,42,44,48 renders claims 1-16,33,34,37-41,42,43,44-47,48-55. It is unclear how a slot is bounded when the slot is an opening.

C) Claims 6 & 14 & 55 are indefinite because it is unclear what limitation is imparted by a "certain manner".

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 30,31 & 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Binder et al (US6,156,179 Dec. 5, 2000).

Binder et al teach an apparatus for capturing analyte comprising a nonconductive polymeric material for support gel matrix and covalently bound ligand (see whole doc. Esp. Abstract & col. 6 lines 53-60 & col. 7 line 66).

Art Unit: 1637

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 32 & 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Binder et al (US6,156,179 Dec. 5, 2000) in view of Mathies et al (US5,274,240 Dec. 28, 1993).

Binder et al teach an apparatus for capturing analyte comprising a nonconductive polymeric material for support gel matrix and covalently bound ligand (see whole doc. Esp. Abstract & col. 6 lines 53-60).

Binder do not teach gel holder with multiple openings or detectable labels.

Mathies et al teach multiple parallel capillaries for detection (see whole doc. esp. abstract). Mathies et al teach fluorescently labels (see whole doc. esp. abstract).

Art Unit: 1637

One of ordinary skill in the art would have been motivated to combine Binder et al's gel with Mathies et al's apparatus in order to detect multiple analytes. Mathies states that a plurality of capillaries allows side by side detection and simultaneous separations (see abstract). It would have been prima facie obvious to apply Mathies et al's plurality of capillary tubes with Binder et al's gel in order to detect multiple different separations and analytes simultaneously.

Moreover, it would have been prima facie obvious to apply Mathies et al's fluorescently labels to capillary electrophoresis in order to detect specific analytes of interest.

Mathies et al's multiple capillaries read on a capture gel holder with openings.

### SUMMARY

7. Claims 1-16, 33, 34, 37-41, 42, 43, 44-47, 48-55 are free of the prior art but rejected under 112 second paragraph. There is no prior art that teach or suggest an apparatus with a base having a pair of electrode channels with a different electrode extending through each channel and migration channel extending between the electrode channels with an enlarged slot in the opening of the migration channel. The closest prior art is Harrington et al (US5,837,116 Nov. 17, 1998) who teach a two dimensional electrophoresis apparatus with two electrodes but do not teach or suggest an enlarged slot in migration channel.

Art Unit: 1637

Claims 17-24 & 56-63 are allowable. There is no prior art that teach a capture gel holder comprising a handle , a plurality of teeth projecting from the handle at least one of the teeth having a bore through the tooth and a gel matrix overlying the bore. The closest prior art is Rice et al (US5,972,188 Oct. 26, 1999) who teach a comb with teeth but do not teach or suggest a teeth with bores with gel.

### CONCLUSION

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Siew whose telephone number is (703) 305-3886 and whose e-mail address is Jeffrey.Siew@uspto.gov. However, the office cannot guarantee security through the e-mail system nor should official papers be transmitted through this route. The examiner is on flex-time schedule and can best be reached on weekdays from 6:30 a.m. to 3 p.m. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Gary Benzion, can be reached on (703)-308-1119.

Any inquiry of a general nature, matching or filed papers or relating to the status of this application or proceeding should be directed to the Tracey Johnson for Art Unit 1637 whose telephone number is (703)-305-2982.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official

Application/Control Number: 09/766,880

Page 7

Art Unit: 1637

Gazette, 1096 OG 30 (November 15, 1989). The CM1 Center numbers for Group 1600 are Voice (703) 308-3290 and Before Final FAX (703) 872-9306 or After Final FAX (703) 30872-9307.

  
JEFFREY SIEW  
PRIMARY EXAMINER

July 5, 2003